

Schedule for Sedimentary Basin Analysis (GEOL 440/540), Fall 2018

Week	Month	Date	Topic	Reading Assignments	Homework Assignments (with due dates)
1	Sept.	25	Course Introduction, Overview		
		27	Tectonics of Sedimentary Basins	Ingersoll (1988); Basins-Overview handout	
2	Oct.	2	Isostasy and Continental Stretching	Ang 1-4; Ein 313-317; Isostasy handout	
		4	Prep for Field Trip: Accretion of Siletzia	Wells et al. (2014); Dorsey 2017 GSA ppt	
		6-7	Weekend Field Trip: Roseburg Area	Basinal Record of Siletzia Accretion	
3		9	Dynamics of Rift Basins	A&A 63-75; Leeder and Gawthorpe (1987)	1. Isostasy Problems (10/9)
		11	Thermal Subsidence, Passive Margins	Ang 5-6, 20-24; A&A 31-40; Thermal handout	
4		16	Flexural Subsidence	Ang 36-42; A&A 116-130; Flexure handout	2. Term Project Outline (10/16)
		18	Foreland Basins	B&I 331-347; DeCelles and Giles (1996)	
5		23	Sediment Continuity, Mass Balance	Ang 90-113; Basin-Filling handout	3. Thermal Subsidence (10/23)
		25	Basin-Filling Models	Heller and Paola (1992); Basin-Filling handout	
6		30	Basin-Filling Models, Contd.	Armitage et al. (2011), something else ...	4. Flexural Modeling (10/30)
	Nov.	1	Midterm Review	(no new reading)	
7		6	Midterm Exam		
		8	Strike-Slip Basins: Intro	Nilson and Sylvester (1995, <i>in B&I</i>)	
8		13	Strike-Slip Basins: Cont.	Seeber et al. (2010); McNabb et al. (2017)	5. Field Trip Report (11/13)
		15	Effects of Mantle Dynamics	Rudge et al (2008); Hartley et al. (2011)	
9		20	Term Project Presentations (3)	tba	<i>I will review mature draft of term papers, if received by Nov. 21</i>
		22	Thanksgiving, no class		
10		27	Term Project Presentations (3)	tba	
		29	Term Project Presentations (3)	tba	
	Dec.	5	Term Papers Due Dec. 5 (Wednesday)	(no extensions)	
		Finals Week (Dec. 3-7): No Final Exam			

Ang = Angevine et al. (1990); B&I = Busby and Ingersoll (1995); A&A = Allen and Allen (2005); Ein = Einsele (1992).

Readings and class handouts are posted at the course web page: <https://pages.uoregon.edu/rdorsey/BasinAnalysis/basinshome.html>.

This is a tentative schedule that we will most likely follow. Note that reading assignments will be added and may change during the term.